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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,078	05/22/2001	Takeyoshi Ikeura	36856.801	9017
7590 05/04/2005 KEATING & BENNETT, LLP 10400 Eaton Place Suite 312 Fairfax, VA 22030			EXAMINER NGUYEN, TUYEN T	
			ART UNIT 2832	PAPER NUMBER

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,078

Applicant(s)

IKEURA ET AL.

Examiner

TUYEN T. NGUYEN

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 and 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-13 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/25/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art of figure 5 [AAPA] in view of Watanabe et al. [JP 61-058221].

AAPA discloses a transformer [10] comprising:

- a common base member [figure 5]
- a bobbin structure [figure 5] having first and second tube shaped members [11, 141] coaxial and integral with one another and disposed on the base member, the first tube shaped member being located radially within the second tube shaped member so as to form a gap therebetween;
- a first winding [12] located in the gap between the first and second tube shaped members; and
- a second winding [15] affixed to the second tube shaped member of the bobbin structure.

AAPA discloses the instant claimed invention except for the first and second tube-shaped members being integral with the common base member and the air-core coil inserted in the gap of the bobbin and not being affixed to either of the tube shaped members.

Watanabe et al. discloses a transformer [figure 1] comprising :

- a bobbin structure [figure 2] including a base member [1c], a first tube shaped member [1a] and a second tube shaped member [1b] co-axial and integral with one another and disposed on the base member, the first tube shaped member being located radially within the second tube shaped member so as to form a gap therebetween;
- an air-core coil [2] being inserted in the gap and not affixed to either of the tube shaped members.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use the air-core coil arrangement of Watanabe et al. in AAPA for the purpose of facilitating manufacturing.

Regarding claims 3 and 13, the specific turn ratio between the first and second windings would have been an obvious design consideration based on the desired output voltage.

Regarding claims 10 and 20, the specific number of terminals used for each winding, or winding portion, would have been an obvious consideration to permit tapping of specific voltages from the transformer.

Regarding claims 8 and 18, applicant's admitted prior art of figure 5 discloses the first and second tube-shaped members coupled together by a radially extending base member.

Regarding claims 9 and 19, applicant's admitted prior art of figure 5 discloses terminal pins (13) extending from the base member.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 8-13 and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN *TTN*

Tuyen T. Nguyen